tion does not agree with the author's observations, Julius proposes another, namely, that the phenomenon is produced by anomalous dispersion and that in fact the free ions, which according to Ebert and Lenard are most numerous in the upper strata of air, are in general the cause of the terrestrial absorption. In this way the rarity of the phenomenon, its dependence on meteorological conditions, and its slow diminution of duration with the altitude above the horizon may be accounted for. But H. Schering remarks that independent of the fact that, according to the latest measurements in free balloons made by Luedeling as well as by Gerdien, an increase of ions at the greatest altitudes is not probable, there exists such a great difference in the magnitude of the number of ions and the number of molecules in a cubic centimeter that we ought not to expect such a spectral effect as Julius assumes even if the ionization were many thousand times greater than is ordinarily found. In fact, the average number of ions in a cubic centimeter is only 1×10^3, whereas the number of molecules is 2×10^{19}.

BALL LIGHTNING.

A letter from Mrs. A. E. Russell, of Paducah, Ky., reports the following phenomenon which seems to be as genuine a case of ball lightning as any that has hitherto been described:

My niece and I were sitting in my front hall on July 16, 1905, when suddenly, without warning, what seemed like a big ball of fire passed between our heads. My niece's head was not distant more than six inches from our telephone box. She experienced no shock, while I was blinded by it for half a minute.

The front and back hall doors were screened[1] but they showed no sign of any lightning having touched them. A tree in the back yard about ten yards from the back hall door had a round hole made in the bark with a dent in the wood just as if a cannon ball had been shot against it. The three horses standing near the tree were knocked down; the horse standing in a straight line between the tree and the house seemed dead for a long while.

My niece says that there had been a low rumbling noise of thunder just previous to the lightning, but I did not hear it. A neighbor who had left my house two minutes before and was on the road says she heard no thunder and saw no lightning until suddenly a terrific explosion seemed to occur just over her head; she was blinded and saw nothing more.

I have witnessed the lightning strike trees three times on our front lawn, but I never before saw a ball of fire.

CORRIGENDA.

MONTHLY WEATHER REVIEW for 1904, Vol. XXXII, No. 13, Annual Summary, page 605, first column, line 41, for "levelings" read "altitude"; line 42, for "Prof. Joseph N. Le Conte" read "the director of the U. S. Geological Survey." For August, 1905, page 350, column 2, "Rivers and Floods," line 7, for "northern" read "southern."

THE WEATHER OF THE MONTH.

By Mr. WM. B. STOCKMAN, Chief, Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart VIII and the average values and departures from normal are shown in Tables I and V.

The mean barometric pressure for the month was highest over New England, the Middle Atlantic States, northern portion of the South Atlantic States, Ohio Valley and Tennessee, and lower Lake region, with the crest over northeastern West Virginia carrying a value of 30.11 inches. The mean pressure was lowest over southeastern California and southwestern Arizona, the minimum, 29.76 inches, occurring at Yuma.

The mean pressure for the month was .01 to .03 inch above the normal in Virginia, eastern West Virginia, and northwestern California; elsewhere it was below the normal, but with slight departures, except over northeastern California, west-central Nevada, Washington, northern Idaho, and northwestern Montana, where they ranged from —.05 to —.08 inch.

The mean pressure diminished from that of August, 1905, in southern Florida, western New Mexico, Arizona, Utah, Colorado, Wyoming, western South Dakota, Montana, except the northeastern portion, Washington, except the southeastern portion, western Oregon, and California, except the extreme northeastern portion; elsewhere the mean pressure increased. The decrease was greatest over western Washington, where it ranged from —.05 to —.12 inch; and the increase was most marked over the Atlantic States as far south as central North Carolina, lower Lake region, southern portion of the upper Lake region, central Mississippi and lower Missouri valleys, and the Ohio Valley and Tennessee, where it ranged from +.05 to +.09 inch.

TEMPERATURE OF THE AIR.

The mean temperature for the month was below the normal in New England, except southwestern Connecticut, northeastern and east-central New York, northeastern and southwestern Pennsylvania, northwestern West Virginia, western Arizona, California, except the east-central and northwestern portions, northwestern Nevada, extreme northwestern Oregon, and on the immediate coast of Washington; elsewhere it was above the normal. The negative departures were less than 1.0°, except in one instance in central California, while the positive departures generally were greater than 2.0°, and more than 4.0° in southwestern Kansas, east-central Nebraska, southeastern Wisconsin, north-central upper Michigan, western Minnesota, and North Dakota, and from +5.0° to +5.3° in eastern Montana.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	8	56.9	— 0.9	—12.2	—1.4
Middle Atlantic	12	67.1	+ 0.8	— 6.6	—0.7
South Atlantic	10	75.6	+ 2.4	— 2.8	—0.3
Florida Peninsula*	8	80.7	+ 1.5	+ 3.8	+0.4
East Gulf	9	77.8	+ 2.5	— 5.6	—0.6
West Gulf	7	78.6	+ 2.6	— 5.2	—0.6
Ohio Valley and Tennessee	11	69.6	+ 1.4	— 7.8	—0.9
Lower Lake	8	64.4	+ 1.3	— 9.7	—1.1
Upper Lake	10	62.2	+ 3.0	— 3.9	—0.4
North Dakota*	8	59.8	+ 2.6	+ 3.9	+0.4
Upper Mississippi Valley	11	67.0	+ 2.3	— 6.4	—0.7
Missouri Valley	11	67.7	+ 2.5	— 4.0	—0.4
Northern Slope	7	61.4	+ 3.3	+ 1.9	+0.2
Middle Slope	6	70.4	+ 2.7	— 4.4	—0.5
Southern Slope*	6	74.5	+ 2.5	— 9.6	—1.1
Southern Plateau*	13	69.7	+ 0.2	— 4.1	—0.5
Middle Plateau*	8	61.4	+ 0.5	+ 5.1	+0.6
Northern Plateau*	12	60.6	+ 2.8	+14.0	+1.6
North Pacific	7	58.2	+ 1.1	+10.4	+1.2
Middle Pacific	5	64.9	+ 0.4	+ 7.7	+0.9
South Pacific	4	67.8	— 0.5	+ 5.8	+0.6

* Regular Weather Bureau and selected cooperative stations.

Maximum temperatures of 80°, or higher, were reported from all sections, except the coast of Maine, the islands off Massachusetts and Rhode Island, the northern portions of New Hampshire and Vermont, the mountain regions of Colorado, and the northwestern portion of Washington; 90°, or higher, in the South Atlantic and Gulf States, Tennessee, except the mountain districts, lower Ohio Valley, southern portions of the upper Mississippi and Missouri valleys, and generally over the slope and Pacific regions, except along

[1] Light fly-screen doors for the summer season.—[Ed.]